

A Report of the Surgeon General

Preventing Tobacco Use Among Youth and Young Adults



**WE CAN
MAKE THE NEXT GENERATION TOBACCO-FREE**



**Centers for Disease
Control and Prevention**
Office on Smoking
and Health

Note From the U.S. Surgeon General



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About This Booklet

Nearly all tobacco use begins during youth and young adulthood. Tobacco contains nicotine, a highly addictive drug that causes many young people to progress from smoking occasionally to smoking every day.

Each day across the United States, more than 3,800 youth under age 18 smoke their first cigarette. Although much progress has been made to reduce the prevalence of smoking since the first Surgeon General's report in 1964, today nearly one in four high school seniors and one in three young adults under age 26 smoke.

Most young people don't consider the long-term health consequences associated with tobacco use when they start smoking. Because most high school smokers are not able to break free from the powerful, addicting effects of nicotine, about three out of four will smoke in adulthood. Among those who persist in smoking, one third will die about 13 years earlier than their nonsmoking peers.

This Surgeon General's report details the causes and the consequences of tobacco use among youth and young adults by focusing on the social, environmental, advertising, and marketing influences that encourage youth and young adults to initiate and sustain tobacco use. This is the first time tobacco data on young adults as a discrete population have been explored in detail. The report also highlights successful strategies to prevent young people from using tobacco.

This booklet summarizes the 2012 report and offers suggestions on how we can work together to protect youth and young adults from the harmful effects of tobacco. We need your help on this public health issue. Everything from making your home and car tobacco-free zones to demanding smoke-free policies in your community can make a difference. WE CAN make our next generation tobacco-free!

The Surgeon General is America's doctor. The President appoints the Surgeon General as the highest-ranking health leader to protect the health of all Americans. The Surgeon General uses the strongest, most complete scientific information available to promote health, to reduce risk for illness and injury, and to make the nation healthier. Some of the Surgeon General's most important tools are comprehensive scientific reports on specific health issues, such as this report on tobacco use among youth and young adults. To read the full report and its related materials, go to www.surgeongeneral.gov.

What's Inside This Booklet



This booklet contains highlights from the 2012 Surgeon General's report on tobacco use among youth and teens ages 12 through 17 and young adults ages 18 through 25. The first four pages are an overview of youth and young adult tobacco use, and the sections that follow provide details on health effects, factors that encourage young people to use tobacco, the role of the tobacco industry, and what we can do to solve the problem. For more information and additional resources, go to www.cdc.gov/tobacco. If you smoke and want to quit smoking, call 1-800-QUIT NOW (784-8669).

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Tobacco Use: A Preventable Epidemic



Tobacco use by teens and young adults remains shockingly high in the United States. Today, more than 3.6 million middle and high school students smoke cigarettes. In fact, for every person who dies due to smoking—more than 1,200 each day—at least two youth or young adults become regular smokers. Nearly 90% of these replacement smokers try their first cigarette by age 18. Clearly, we have not solved the problem.

THE PROBLEM

Today's teens and young adults can access information on millions of subjects almost instantly. But many of the same media that warn of the dangers of tobacco use also carry messages that smoking is cool—edgy—adult. That's one reason nearly 4,000 kids under age 18 try their first cigarette every day. That's almost 1.5 million youth a year.

In fact, nearly 9 out of 10 smokers start smoking by age 18, and 99% start by age 26. On any given day, more than 2,500 youth and young adults who have been occasional smokers will become regular smokers. And at least a third of these replacement smokers will die early from smoking.

The percentage of youth who smoke went down every year between 1997 and 2003.

But since then, the decrease in teen smoking has slowed and the use of some forms of tobacco by youth has leveled out. Today, one out of four high school seniors and one out of three young adults under age 26 are smokers.

THE CAUSES

Young people start using tobacco for many reasons. These are some of the most important:

The Tobacco Industry

Fewer adults are smoking today, both because many have quit and because about half of long-term smokers die from diseases caused by their tobacco use. So, cigarette companies look to young people as replacement smokers. They use a variety of marketing strategies to encourage new consumers to try their products, and to continue using them.

Susceptibility of Youth and Young Adults

Adolescence and young adulthood are the times when people are most susceptible to starting tobacco use. Young people are more vulnerable and more influenced by marketing than adults. They are also more willing to take risks, even with their health. When smoking is portrayed as a social norm among others who are seen as cool, sophisticated, rebellious, or fun-loving, teens often respond by copying the behavior and trying cigarettes themselves. If their friends smoke, or their siblings smoke, they are even more likely to smoke themselves.

Smoking causes disease and death

People who smoke don't have to wait for tobacco use to damage their health. There are more than 7,000 chemicals and chemical compounds in cigarette smoke, many of which are toxic. These chemicals can cause immediate damage to the human body. Even young adults under age 30 who started smoking in their teens and early twenties can develop smoking-related health problems, such as:

- Early cardiovascular disease.
- Smaller lungs that don't function normally.
- Wheezing that can lead to a diagnosis of asthma.
- DNA damage that can cause cancer almost anywhere in the body.

On average, lifelong smokers get sicker and die younger than nonsmokers. These smokers die an average of 13 years sooner.



WE CAN help teens and young adults say no to tobacco.

And young people are sensitive to nicotine. The younger they are when they start using tobacco, the more likely they are to become addicted to nicotine and the more heavily addicted they will become.

Young people sometimes believe nothing can hurt them. Facts about health problems that could happen in middle age—or even right away—may mean little to them now. Many teens and young adults don't realize how addictive nicotine is. Some may have a tough time making healthy choices or sorting out tobacco myths from facts. Others may want to fit in with a group or seem older, edgier, or more socially grounded. And images that encourage tobacco use are everywhere—from the Internet to the movies to big, bright advertisements at convenience stores. All of these factors make youth a prime market for tobacco products.

Social Norms

Many norms in our society influence young people to try tobacco products. People smoke in public in half of U.S. states because there are no comprehensive smoke-free laws that prohibit smoking at work sites, restaurants, and bars. Even states that prohibit smoking inside public buildings often have outdoor smoking areas, some near schools and day care centers. Tobacco use is prominent in mass media, including in movies, social media, video games, and glossy magazines. And tobacco advertising both inside and outside retail stores is often the largest, most visible advertising for any product.





If young people don't start using tobacco by age 26,
they almost certainly will never start.

THE SOLUTIONS

Prevention is critical. If young people don't start using tobacco by age 26, they almost certainly will never start. The good news is that there are many things we can do to help keep teens and young adults tobacco-free. We can:

- Create a world where seeing people smoke or use other tobacco products is the exception, not the norm.
- Take steps that make it harder for youth to use tobacco, such as raising cigarette prices and enforcing laws that prohibit the sale of tobacco to children.
- Further limit tobacco marketing that is likely to be seen by young people.
- Limit youth exposure to smoking in movies and other media.

- Educate young people and help them make healthy choices.
- Set an example—encourage young people to avoid tobacco use by quitting ourselves.

For many decades, local and state health departments, schools, and federal programs have taken steps to protect youth from tobacco use. But in recent years, many of these efforts have been scaled back. We know what works to keep young people tobacco-free, but we don't always do what is necessary. We have already made some progress in reducing tobacco use by youth. Let's finish what we started and make the next generation tobacco-free. To learn more about steps to take, read "What We Can Do" on page 13.

Smoking and Health: They Just Don't Mix



It's well known that smoking is bad for your health and causes many serious diseases later in life. In fact, one out of three adolescents who continue to smoke regularly will die prematurely from cigarette smoking. But did you know that smoking can also harm young smokers' health right away?

EARLY SMOKING CAN CAUSE EARLY HEART DISEASE

New research shows that smoking during adolescence and young adulthood causes early damage to the abdominal aorta, the large artery that carries oxygen-rich blood from the heart through the abdomen to major organs. Even young adults who have only been smoking for a few years can show signs of narrowing of this large artery. When a person breathes tobacco smoke, it causes immediate damage to blood vessels throughout the body.

Repeatedly breathing tobacco smoke can cause a mixture of scar tissue and fats to build up inside blood vessels. This plaque makes blood vessels narrow and limits blood flow.

EARLY SMOKING CAN HARM LUNGS NOW

Young people are still growing. Their lungs don't reach full size until late teens for girls and after age 20 for boys. Adults who smoked during adolescence can have lungs that never grow to their potential size and never perform at full capacity.

Why is early smoking so harmful?

People who start smoking as young teens are more likely to:

- Get addicted to nicotine.
- Become lifetime smokers.
- Get diseases caused by tobacco use.
- Die from a disease caused by tobacco use.



Photo courtesy of New York City Department of Health and Mental Hygiene

The lungs of young smokers don't perform as well as those of nonsmokers. Because their lungs don't work as well, they are short of breath and may have more trouble participating in sports and other physical activities. Even though people who stop smoking will improve their health dramatically, early lung damage doesn't go away completely in most cases.

SMOKING CAN LEAD TO CANCER

Tobacco smoke contains about 70 chemicals that can cause cancer. It's no surprise, then, that smoking causes about one in three of all cancer deaths in the United States. And it can cause cancer almost anywhere in the body by damaging DNA.

Youth—a Great Time to Quit

The good news: Smokers who quit before age 30 will undo much of the health damage caused by tobacco use.

Why Is It So Hard to Quit?

Tobacco users often get hooked on nicotine—the drug in cigarettes, cigars, and smokeless tobacco (snuff and chewing tobacco). Many teens and young adults plan to quit using tobacco after a few years but find out too late how powerfully addictive nicotine can be. Like heroin and cocaine, nicotine acts on the brain and creates feelings of pleasure or satisfaction. Young brains are still developing. That may be one reason many teens feel dependent on tobacco after using it for only a short time.

Quitting isn't easy, but it can be done.

Better yet—don't start!

Not starting is even better than quitting. Learn what risk factors to look for and how to help yourself, your friends, or the young people in your life stay tobacco-free (see page 13). Their health depends on it!

WE CAN help young people say no to tobacco use.

Why Young People Use Tobacco



There are many reasons young people begin using tobacco. Teenagers, and even preteens, are developing behaviors, social connections, and attitudes. They often experiment with different behaviors because they see these behaviors in peers they admire, in adults they hope to be like someday, or in media or entertainment idols.

SOCIAL INFLUENCES

Adolescents and young adults are very susceptible to social influences. If they see tobacco use as a normal behavior because their friends or family members use tobacco, young people are more likely to try tobacco themselves.

Teens and young adults highly value their friendships and want to fit in with their group. What their peers do—and especially what the leaders of their social groups do—can have

a strong influence on what they do. Young people whose friends smoke are much more likely to smoke as well.

PHYSICAL INFLUENCES

Nicotine is just as addictive as heroin and cocaine. Because they are sensitive to nicotine, teens can feel dependent on tobacco sooner than adults. There is also evidence that genetics might make it more difficult for some young people to quit smoking once they have started.

ENVIRONMENTAL INFLUENCES

Teens and young adults are sensitive to what they see and hear in the world around them. If they are exposed to images that portray smokers as cool, attractive, rebellious, fun-loving, risk-taking, or other characteristics they admire, young people may want to smoke, too. Such images are often found in advertising displays at convenience stores and other outlets that sell tobacco. Communities that allow the sale of cigarettes and other tobacco products near schools have higher rates of youth tobacco use than do communities that have tobacco-free zones around schools. If teens and young adults see tobacco use in their homes or in public places within their communities, these images encourage them to see smoking as a normal part of adult behavior.

MOVIES

For many years, tobacco companies paid studios to have their products appear in movies. Even though this practice is no longer allowed, movies for youth, and even some movies for children, may include images of characters using tobacco. These images are powerful because they can make smoking seem like a normal, acceptable, or even attractive activity. Young people may also look up to movie stars, both on and off screen, and may want to imitate behaviors they see.

Over time, the number of images of tobacco use in movies has gone down. But movies still contain thousands of images of tobacco use that are proven to encourage young people to start smoking. In 2010, nearly a third of top-grossing youth-rated movies—those with G, PG, or PG-13 ratings—contained images of tobacco use.

This is how many teens and young adults use tobacco today:

- 3 million high school students and 600,000 middle school students smoke cigarettes.
- 1 in 3 young adults smokes cigarettes.
- 1 in 4 high school seniors smokes cigarettes.
- 1 in 5 male high school seniors smokes cigars and 1 in 10 uses smokeless tobacco.
- Many young people use more than one type of tobacco. Among those who use tobacco, more than half of high school males and nearly a third of high school females use more than one tobacco product. These products include cigarettes, cigars, and smokeless tobacco, such as chew and snus, a dry snuff in a small teabag-like sachet.



WE CAN make tobacco use the exception, not the norm.

The Tobacco Industry



Tobacco companies use multiple methods and spend lots of money to convince young people that using tobacco is OK—even attractive. Their business depends on getting these young consumers to try—and to keep using—their products. Young people are responsive to marketing, making them vulnerable to messages that encourage tobacco use.

KEEPING PRICES DOWN

Tobacco companies lower prices through coupons and other promotions so that consumers can afford to buy their products. Teens are especially sensitive to pricing.

In 2008, cigarette makers spent nearly \$10 billion to market their products. Much of this spending—\$6 out of every \$7—was used to pay for price cuts through coupons, sales, and giveaways. Similarly, smokeless tobacco makers spent about \$3 out of every \$4 of their \$547 million marketing budget to keep prices low.

MAKING PRODUCTS EASY TO BUY

A number of laws limit face-to-face and vending machine sales of tobacco products to young people. But there is less oversight online. While most websites say buyers must be at least 18 years old, research found that 15- and 16-year-olds were able to place orders successfully. Nearly 8 out of 10 of those young people received their orders, and only 1 out of 10 shipments required proof of age at the time of delivery of the tobacco product.

DESIGNING PRODUCTS THAT APPEAL TO YOUTH

Cigarettes that appeal to new smokers are often smoother and milder to improve taste and reduce the body’s physical reaction to the smoke. While flavored cigarettes are now prohibited, the industry still puts fruit flavoring and other kid-friendly flavors in many of their cigars. This is especially true for cigarette-sized cigars, which are now available in many flavor varieties—such as grape and strawberry—that youth find appealing in other products. Many of these little cigars look exactly like cigarettes with a darker wrapper.

Many smokeless products are also flavored. These include chew and snuff—which come in a variety of forms—and new smokeless products, such as dissolvable tobacco. All of these products can cause serious health problems and lead to nicotine addiction and future smoking. And tobacco companies are still using different techniques to make many cigarette brands taste less harsh—especially brands that young people often use when they start smoking.



Photo courtesy of Campaign for Tobacco-Free Kids

Young people sometimes use smokeless tobacco products in places where cigarettes are banned, such as schools. Snus (dry snuff in a pouch), and dissolvable smokeless products in particular, provide a discreet way for young people to maintain

Myth: Smoking helps you lose weight

Many young people, especially girls and young women, believe that smoking can help them lose weight. But studies show that’s not true—young people who smoke are not thinner than those who don’t.

Cigarette marketing encourages the myth that smoking causes weight loss. And it targets women with brand names that suggest thinness, as well as with long, thin cigarettes.

their addiction to nicotine even when they can’t smoke. In fact, most youth users of these smokeless products also smoke cigarettes. The biggest danger of these products is that they may introduce kids to nicotine, putting them at risk for nicotine addiction.

CREATING A PACKAGE THAT APPEALS TO YOUTH

Packaging has a powerful visual impact. Users come to associate certain brands with certain qualities. Words on packages, such as “slims” and “thins,” push the myth of weight loss. Before they were banned, some words (“low tar,” “light,” “mild”) falsely suggested safety. Studies show that color makes a difference too. Smokers tend to think that cigarettes in lighter-colored packs are “lighter” and safer than cigarettes in darker-colored packs—even when both packs contain the exact same cigarettes.

WE CAN limit tobacco marketing to young people.

Why the industry targets young people

Young people are a prime market for tobacco products. With smoking among adults declining, tobacco makers need to replace long-term users who have quit . . . or died. So the tobacco industry recruits replacement smokers from youth and young adults—the age groups in which 99% of tobacco use begins.

Young adults are a prime target for tobacco advertising and marketing. And messages aimed at this age group also attract the attention of younger consumers—a plus for the tobacco industry.

RETAIL MARKETING

Tobacco companies use many marketing and advertising tools at stores that sell tobacco products. Even the locations where tobacco products are sold can have an impact on tobacco use by young people. For example, more cigarettes are sold in convenience stores than in any other type of store, and 70% of adolescents shop in convenience stores at least once a week—where they are more likely to be exposed to prosmoking messages.

For many years, the tobacco industry has offered sellers financial rewards and discounts when they sell large volumes of their products. Some stores and gas stations place tobacco products on or near checkout counters—a visible spot that may trigger impulse buying.

They also run sales on tobacco products and place vivid, eye-catching ads in windows and outside their buildings. Ads inside the store are sometimes at eye level for preteen children, which research shows might influence them to try tobacco products later.

USING MEDIA TO PROMOTE PRODUCTS

The tobacco industry uses media to promote its products to young people. Here are some of the channels it uses.

Digital Media

Many cigarette companies use websites to promote their products. Some of these websites feature videos, games, coupons, and contests that may appeal to youth. Meanwhile, some young people are using social networking channels (Facebook, Twitter, discussion forums, message boards, and YouTube videos) to sing the praises of tobacco, especially to their peers.

Magazines

Tobacco ads are not allowed on TV or on billboards. But they may still be found in mainstream magazines targeted to adults, and many young people read these. These ads often suggest that using tobacco can make you sexy, popular, thin, and cool.



What We Can Do



WORKING TOGETHER, WE CAN END THE TOBACCO EPIDEMIC.

If we choose to, we can end the tobacco epidemic in this country. But it's going to take all of us—parents, teachers, health care providers, communities, states, schools, and policymakers—supporting policies, programs, and media campaigns that prevent tobacco use by youth and young adults.

POLICIES AND PROGRAMS— WHICH WORK BEST?

There are effective policies and programs that prevent young people from using tobacco. Policies and programs that contain several parts working together to make tobacco use more difficult and less accepted are the ones that work best.

Policies

Policies are very effective because they can change the environment so that choosing a tobacco-free life is encouraged and supported. Government and private entities have implemented a number of policies that are effective in preventing youth tobacco use.



Who is at risk?

Some youth are at higher risk for tobacco use. For example, young people are more likely to use tobacco if they:

- Have access to smoking areas and tobacco products—especially to low-cost or free tobacco.
- Have friends, brothers, or sisters who use tobacco.
- Watch movies that have smoking in them.
- Are not doing well in school or have friends who are not doing well in school.
- Are not engaged in school or religious activities.
- Use other substances, such as alcohol or marijuana.

Here are some policies proven to work best:

- Make tobacco products less affordable.
- Restrict tobacco marketing.
- Ban smoking in public places—such as workplaces, schools, day care centers, hospitals, restaurants, hotels, and parks.
- Require tobacco companies to label tobacco packages with large, graphic health warnings.

Programs

Many states and communities have programs to prevent tobacco use by young people. The most effective ones combine several elements; include evidence-based curricula in secondary schools; work with policies; and influence people at work, at home, in school, in health care settings, and in public places.

MASS MEDIA CAMPAIGNS

Mass media campaigns against tobacco use—most often TV ads—have proven very effective at helping prevent tobacco use by young people. Studies show that teens respond most to ads that trigger strong negative feelings, such as ads about how smoking and secondhand smoke harm health and ads that expose the tobacco industry’s marketing strategies that target young people. Even ads that are designed for adult audiences help reduce tobacco use among young people.

Every 3 or 4 years, new groups of children and teens reach the age where they are vulnerable to influences encouraging them to smoke. To be effective, mass media campaigns must be repeated so they will reach new vulnerable populations.

WE CAN take steps to prevent youth tobacco use.

PARENTS—HOW YOU CAN HELP

You can help your children make healthy choices about tobacco use. Try these tips.

Tell them:

- Key facts about tobacco—this booklet is a good start.
- You don't want anyone—including them—to use tobacco in your house or car.
- You expect they will never use tobacco, or will stop using it.

Help them:

- Cope with their problems.
- Refuse tobacco.
- Quit if they're current users.

Make sure you:

- Know what they're doing and who their friends are.
- Network with other parents who can help you encourage children and teens to refuse tobacco.
- Encourage your children's schools to enforce tobacco-free policies for students, faculty, staff, and visitors both on campus and at all school-sponsored events off campus.
- Enforce movie age restrictions—and discourage teens from playing video games or using other media that feature smoking.
- Never give tobacco to children or teens.
- Set a good example by not using tobacco yourself.



Conclusion



Tobacco use among young Americans has gone down since the 1994 Surgeon General's report, the first comprehensive report on youth and tobacco. But the number of young tobacco users in this country remains far too high.

The 3,800 young people who smoke their first cigarette today are at great risk for developing a serious chronic disease from smoking. And half of long-term smokers die prematurely from a tobacco-related disease.

As a society, we can no longer allow our young people's health to go up in smoke. We must work together to prevent teens and young adults from using tobacco, and we must continue to help those who start using tobacco to quit. In doing so, we will help young people live longer and healthier lives than the generation who came before them. And we will end the tobacco epidemic in this country. Let's finish what we started—help make the next generation tobacco-free!

WE CAN make the next generation tobacco-free.

For more information and additional resources, go to www.cdc.gov/tobacco.
If you smoke and want to quit smoking, call 1-800-QUIT NOW (784-8669).



WE CAN

MAKE THE NEXT GENERATION TOBACCO-FREE

For more information

For more information about the Surgeon General's report, visit www.surgeongeneral.gov.

To learn more about tobacco control and prevention, visit CDC's Smoking & Tobacco Use website at www.cdc.gov/tobacco.

To download copies of this booklet, go to www.cdc.gov/tobacco.

To order copies of this booklet, go to www.cdc.gov/tobacco and click on Publications Catalog or call 1-800-CDC-INFO (1-800-232-4636); TTY: 1-888-232-6348.

To access a telephone quitline serving your area, call 1-800-QUIT-NOW (1-800-784-8669).



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